

1993 Energy Strategy Recommendations Related to Electricity

(Status as of September 1998)

Recommendations		
Natural Gas Planning	Agencies	Status (being updated)
1. Gas utilities should implement cost-effective conservation measures and programs in their service territories consistent with their least-cost plans.	UTC CTED	Puget Sound Energy has a small program for natural gas demand side management including an information-based program and a water heater rebate program. Washington Water Power (WWP) has no conservation programs for natural gas; however, it does have a tariff-rider funding mechanism in place should cost-effective conservation actions be identified. Cascade Natural Gas Co. and Northwest Natural Gas companies do not have DSM tariffs on file and have negligible programs for achieving energy efficiency in their Washington service territories. The declining cost of natural gas means that fewer measures are cost-effective.
2. The state's electric and gas utilities should work closely with WSEO (now CTED) and the UTC to integrate their least-cost planning.	UTC CTED	Puget Sound Energy, which serves the Puget Sound area, is producing two plans – one for gas and one for electricity customers. WWP, which serves parts of Washington near Spokane, has two plans. In neither case are these plans integrated across fuels.
3. WSEO (now CTED) -in cooperation with UTC, utilities, the Bonneville Power Administration (BPA), and the Northwest Power Planning Council (NWPPC), should provide a report to the governor and legislature clearly identifying the nature and extent of savings available from cost-effective fuel choice.	UTC CTED	The report entitled <i>Fuel Blind Integrated Resource Planning Project</i> was published. There has been no recent activity on this strategy.
4. The state should encourage electric utilities to consider fuel choice as a resource in their least-cost planning and to implement appropriate programs.	UTC CTED	Many utilities are reluctant to pursue aggressive fuel switching programs due to potential loss of revenue. Snohomish PUD, Puget Sound Energy (PSE), and Washington Water Power (WWP) are the only utilities that have implemented fuel-switching programs. PSE offers this service to a limited number of low-income customers under its non-tariff program. WWP continues to offer information to guide consumers to switch to natural gas. WWP funds a low-income weatherization program that implements fuel switching to natural gas for qualifying structures. The Northwest Energy Efficiency Alliance has funded a project to work with low-income residents and Housing Authorities that includes support for fuel switching as cost-effective for these consumers.
5. The state should encourage BPA to review its new experimental fuel choice program and refine it where it can be shown that fuel choice is cost-effective and reduces the need to use gas for electricity generation.	NWPPC UTC CTED	BPA is allocating \$15-30 million per year on energy efficiency activities. This is a drop from several hundred million dollars per year in the past. It is unlikely that these limited funds will be allocated to fuel switching activities.

6. The state's gas and electric utilities should provide clear information to support cost-effective fuel choices.	UTC	Under restructuring, utilities are providing information to builders. The majority of units now use gas for heating, if it is available, which coincides with expectations based on cost. The UTC no longer regulates this activity.
Conservation in Use of Electricity		
7. The state should support the aggressive pursuit of all cost-effective conservation and efficiency opportunities in both public and private utility markets.	UTC WSU CTED	The pursuit has become less aggressive recently, for a variety of reasons. Competitive pressures induce cost cutting – including investments in conservation and efficiency projects – in order to reduce immediate rates. It is for this reason that PA once the major funder of public utility efficiency projects, no longer does so. For the same reason, these public utilities are reducing their spending in all areas. Competitive pressures also induce companies to measure efficiency investments against investments such as mergers and acquisitions, which may have higher rates of return.
8. The state should support the effort to develop and implement regulatory approaches that align private utilities' financial interests with the successful implementation of their least-cost plans.	UTC CTED	This recommendation has been overwhelmed amidst discussions of restructuring. Some industry leaders theorize that a fully functional competitive industry would send the appropriate price signals to encourage efficient use of energy. Other leaders would pursue an approach like that adopted by PacifiCorp in Oregon (summer, 1998), which disassociates revenue earned from kilowatt-hours sold.
9. BPA should develop better incentives and market conditions to ensure the successes of conservation investments in service areas of public utilities -- both larger utilities in major urban growth areas and smaller utilities in slow-load growth areas.	CTED	CTED has long supported BPA taking a large role in conservation and other public purposes and has worked with the NWPPC, the Comprehensive Review, the Transition Board, and in BPA forums and work groups to encourage BPA to do so. BPA's rate discount proposal as part of Subscription is a welcome step in the right direction since it meets the strategic objective of providing incentives for conservation of all its utility customers.
10. The state should regularly revise state commercial and residential building codes to achieve the region's conservation targets.	CTED WSU	The non-residential energy coder underwent its last major revision in 1994. The residential code was partially revised in 1997, but retained most of the energy efficiency provisions included in the 1991 version. The next scheduled code revision cycle will be in 1999-2000, when the state begins to shift to the new codes developed by the International Code Council. CTED will keep informed of energy code developments by way of Building Code Council staff and WSU.
11. BPA and the investor-owned gas and electric utilities should include the cost of supporting code implementation (education, training, and enforcement) as a high priority for funding.	UTC CTED WSU	BPA and the investor-owned utilities fund the NEEA. NEEA is actively promoting energy efficient building practices. There may be limited funds available to support code development or code analysis as part of promoting efficient building practices. Neither utilities nor BPA is currently funding code enforcement; there are no plans for them to fund future enforcement.
12. The NWPPC, WSEO (now WSU), UTC, BPA, and utilities should cooperate in the development of a set of standard and uniform principles for evaluating cost-effectiveness and verifying the performance of BPA and utility financed conservation measures.	UTC CTED WSU	The NWPPC is working with BPA and other energy partners in the region to create a Regional Technical Forum (RTF). Its responsibilities include developing standard evaluation methodologies, and verifying or tracking energy conservation in the region. They may also be charged with developing BPA's energy efficiency subscription option. CTED staff provided comments and testimony supporting the RTF.

13. The state and region should take full advantage of all federal funds available for supporting conservation technology transfer and demonstration.	CTED DOE WSU	WSU has competed well in bringing new federal funds into the state for energy projects. WSU has received five new U.S. Department of Energy special projects for FY99. Funding for these projects is competitive, and Washington has traditionally done very well in competition. WSU is negotiating to host the National Codes Conference in Washington in 1999. CTED continues to provide policy support to the U.S. Department of Energy and the U.S. Environmental Protection Agency for energy efficiency and renewable energy programs.
14. The State Board for Community and Technical Colleges and the Higher Education Coordinating Board should develop curricula and provide training and certification programs for energy-related specializations.	WSU	No current activity.
15. The state should vigorously pursue programs that ensure that the public buildings are constructed and operated to use energy efficiently.	GA	Revised Energy Life Cycle Cost Analysis Guidelines for public agencies were published in 1998. All guidelines and spreadsheets are now available via the Internet at www.ga.wa.gov/eas.elcca . GA is actively promoting building commissioning through a pilot project with K-12 schools, higher education, cities, counties, state and federal agencies. GA manages the Plant Operations Support Program, a consortium of facilities managers and operators who share informative and operationally oriented information with other facility managers. Additional information is available at http://www.ga.gov/plant/plantops.htm .
Improving System Efficiencies		
16. The state should support cooperative multi-state analyses of the opportunity for greater seasonal electricity exchanges along the Pacific Coast.	UTC CTED	<p>The western region has had an active wholesale power market for many years, now supported and encouraged by FERC through its Order 888. While development of a western region Independent Grid Operator (IndeGo) has stalled, the west already benefits from open wholesale markets. One mitigating factor, however, has been the derating of the Pacific Intertie due to concerns over system reliability. The Western Systems Coordinating Council is responsible for these system operating parameters.</p> <p>The UTC participates in ongoing regional and national discussions, through National Association of Regulatory Utility Commissioners, aimed at assuring continued system reliability as more players participate in the wholesale market. The UTC actively followed and commented on the development of the IndeGo proposal and now is tracking discussion of the next potential regional body called an Independent Grid Scheduler.</p>
17. BPA should improve policies to boost access to interstate transmission lines and should examine shared ownership options.	UTC CTED	<p>BPA has implemented open access transmission to a significant degree. The formation of a regional independent grid operator has been investigated by activities were terminated primarily because of cost shifting concerns. FERC may decide to order formation of such entities.</p> <p>BPA was a participant in the development of the IndeGo proposal, despite the fact that it expressed doubts over its authority to physically join such an organization.</p>

18. The U.S. Bureau of Reclamation and the U.S. Army Corps of Engineers should include turbine efficiency improvements in their budgets and promptly implement measures, in view of rising regional power demand and the low cost and impact of these resources.	NWPPC	No current action. The Corps and Bureau have implemented turbine efficiency improvements when funding has been available. An up-to-date compilation is not yet available.
Renewable Energy Sources		
19. Utilities and BPA should experiment with targeted solicitations for renewable resources that are nearly competitive with gas.	CTED	This recommendation is outdated based on changes in the industry since the Energy Strategy was written. BPA has created the Bonneville Environmental Foundation to fund investments in renewable energy resources and to market that power to customers. Other Northwest utilities are investigating "green power" development and purchases. CTED is tracking developments and encouraging renewable resource development and policies.
20. NWPPC, BPA, UTC, and utilities should move quickly to improve their ability to evaluate the full range of benefits from renewable energy technologies.	WSU UTC CTED	The NWPPC continues to inventory and evaluate renewable energy projects and technologies. WSU's Energy Program remains the main state level involvement in biomass, photovoltaics, geothermal, and related renewable energy technologies. CTED and the UTC are developing a report to the Legislature in response to Senate Bill 6560 of the 1998 session that will address current levels of investment in renewable resource technologies in the region.
21. The state should consider renewable energy projects, such as wind turbines, suitable on parcels of land designated as range land or open space.	DNR CTED Fish & Wildlife	Agencies worked with DNR to quantify the value of state owned land that could be used for wind energy development. Counties are currently taxing wind farm land at rates that do not discourage wind energy development. No further action seems needed at this time.
Low-income Assistance		
22. The state should support funding that addresses the energy needs of low-income citizens.	CTED UTC	The UTC supports the concepts of on-going public purpose spending as outlined in the Regional Review. All three investor-owned utilities have demand side management programs, which contain low-income assistance components. CTED is working with the Affordable Housing Advisory Board to integrate residential energy efficiency services with other affordable housing programs. The Housing Trust Fund received an appropriation for the 97-99 biennium for weatherization. The appropriation matches funds from utilities, rental owners, and other entities. CTED also participated in utility collaboratives and technical advisory groups during demand side management planning. It supported funding of the Energy Project, a joint leveraging/education effort between CTED and the Association of Community Action Agencies. Future activities include: 1) Justify continued Housing Trust Fund Funding. 2) Support continued funding and activities of the Energy Project. 3) Support increased federal funding, including BPA funds.

23. CTED should work with WSEO, the AG's Office, and electric and gas utilities to ensure that low-income weatherization programs address energy savings for the largest number of low-income citizens possible.	CTED UTC	As reported above, CTED has worked this biennium and continues to work with: <ul style="list-style-type: none"> • Affordable Housing Advisory Board • UTC • Utility collaboratives and technical advisory groups • Interagency Energy Strategy Working Group • BPA
Energy Education		
24. The state should support education activities that increase the energy literacy of Washington citizens.	CTED WSU SPI	CTED is advocating for utilities to fund K-12 resource education programs that address energy education. CTED is requesting that PSE modify their current education program to change it from a program offered by consultants to a program that trains teachers to provide the curriculum. CTED is supporting WWP/Avista's efforts to develop a K-12 education program to enhance its resource conservation manager program in the schools. CTED is also conducting some secondary research into the role of education and marketing in achieving conservation and renewable resource development. WSU provides fact sheets, a library, education and training for a fee, and a web site. No current activity by SPI.
25. The legislature should provide funds to SPI to produce the second phase of the "Energy, Food, and You" curriculum.	SPI	Funding was not provided. Information in the curriculum is now seriously out of date.
26. WSEO (now CTED and WSU) should survey utilities and building operators and advise the Higher Education Coordinating Board about what programs should be developed to train technicians and system operators for conservation and efficiency work in the residential, commercial, and industrial sectors.	CTED WSU	The Northwest Energy Efficiency Council (NEEC) is now offering a comprehensive building operator training program supported with funds for the NEEA. The program includes coordination and cooperation with the state's community colleges and vocational/technical schools.
27. The state's universities should examine their engineering and architecture programs to ensure that tomorrow's professional graduates are prepared to design facilities of all kinds with energy use in mind.	HEC WSU	WSU Energy Program staff have contacted WSU's Interdisciplinary Design Institute (IDI), a fifth year architecture program that includes construction management, interior design, and landscape architecture, to explore the possibility of including energy and resource conservation in their curriculum. WSU Energy Program could provide guest lectures, conduct energy and resource conservation presentations, seminars, and workshops; serve as a resource for students; work with IDI on internships, special projects, independent studies, and collaborative in research activities. Although both WSU programs were enthusiastic about the possibility of working together, the details and logistics are still being worked out.

28. Higher education programs should include energy education units in pre-service and in-service teacher training.	HEC	No current activity.
Carbon Dioxide and Global Warming		
29. WSEO (now WSU) should develop a more comprehensive inventory and projection of carbon dioxide and other greenhouse gas emissions and identify the most cost-effective measures for meeting emissions targets.	DOE WSU CTED	Greenhouse Gas Inventory completed 1999 "Greenhouse Gas Emissions in Washington State."
30. The state should urge our Congressional delegation to support a national carbon dioxide and greenhouse gas emission target.	DOE CTED	As part of the 1997 Kyoto protocol on greenhouse gas reduction, U.S. negotiators agreed to reduce U.S. emissions to 7% below 1990 baseline by the period 2008-2012. Ratification of the treaty is not expected to occur until 2000, at the earliest. CTED is working with other state and federal agencies and nonprofit groups to promote policies, which reduce greenhouse gas emissions while expanding the state's energy efficiency and renewable energy industry.
Environmental Regulation and Energy Decision Making		
31. BPA and the state's electric utilities should incorporate quantifiable costs, including environmental costs, into least-cost planning and modeling.	UTC CTED	No current action. In 1999 the UTC will be conducting a review of its integrated Resource Planning rules as contained in WAC 480-107 in compliance with the Governor's executive order. BPA considers some environmental costs in its least cost planning. However, it argues that the opening of the competitive wholesale power market has made consideration of environmental costs very difficult. Otherwise, the majority of utilities in Washington State are not doing this.
Siting Energy Facilities		
32. The Governor should instruct his cabinet to focus its attention on implementing the provisions of the state energy strategy using existing rules, but avoiding costly duplication and ensuring rapid decision making.	CTED	Executive Order 94-01 and Chapter 207, Laws of 1994 make the Energy Strategy the primary guide for implementing the State's energy policy.
33. WSEO (now CTED) should take the lead in ensuring that supply and conservation projects consistent with the strategy receive fair and rapid treatment by the many state, federal, and local agencies that must review them.	CTED	EFSEC provides a coordinated one-stop siting process for energy facilities 350 megawatts or greater. Local governments appoint members to EFSEC with the energy facility is in their jurisdiction.
34. BPA and investor-owned utilities should consider funding generic impact investigations, particularly for renewable technologies, so as to narrow the number of issues requiring study during actual siting.	UTC CTED	In a restructured electric utility environment, private energy developers (merchant plants) are predominant in the development of energy facilities, not BPA or regulated utilities. BPA is actively engaged in wind project purchases. Coops have formed "last Mile Coop" to develop renewables, principally wind.

35. The legislature should form a siting review panel, similar to the State Environmental Policy Act Review Panel of 1982-83, to develop revised state siting procedures and legislation to implement them.	CTED	Completed. EFSEC Legislation passed in 2001.
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List of Acronyms:

BPA	Bonneville Power Administration
CTED	Washington State Department of Community, Trade & Economic Development
DNR	Washington State Department of Natural Resources
EFSEC	Energy Facility Site Evaluation Council
FERC	Federal Energy Regulatory Commission
IDI	Interdisciplinary Design Institute
IndeGo	Independent Grid Operator
NEEA	Northwest Energy Efficiency Alliance
NEEC	Northwest Energy Efficiency Council
NWPPC	Northwest Power Planning Council
PSE	Puget Sound Energy
RTF	Regional Technical Forum
SPI	Washington State Superintendent of Public Instruction
UTC	Washington Utilities and Transportation Commission
WSEO	Washington State Energy Office (closed in 1996)
WSU	Washington State University Cooperative Extension Energy Program
WWP	Washington Water Power